Table 3: Estimates of agreement, sensitivity, specificity, and predictive values for stroke algorithms

# Years		Algorithms	κ	Sens. (%)	Spec. (%)	Youden	PPV (%)	NPV (%)
1	1	1+H	0.01	0.6	100.0	0.01	19.8	98.5
	2	1+P	0.25	24.3	99.1	0.23	28.5	98.9
	3	2+ P	0.26	20.0	99.6	0.20	40.0	98.8
	4	1+ H or 1+ P	0.25	24.3	99.1	0.23	28.2	98.9
	5	1+ H or 1+ P or 1+ Rx	0.29	63.1	96.2	0.59	20.0	99.4
	6	1+H or 2+P or (1 P and 2+Rx)	0.29	23.6	99.5	0.23	40.5	98.9
2	7	1+H	0.12	6.8	99.9	0.07	55.4	98.6
	8	1+P	0.35	39.3	98.8	0.38	33.0	99.1
	9	2+ P	0.41	35.7	99.5	0.35	50.7	99.0
	10	1+ H or 1+ P	0.35	39.7	98.8	0.38	32.7	99.1
	11	1+ H or 1+ P or 1+ Rx	0.26	65.2	95.3	0.61	17.3	99.5
	12	1+H or 2+P or (1 P and 2+Rx)	0.42	39.3	99.3	0.39	46.3	99.1
3	13	1+H	0.21	13.4	99.8	0.13	52.4	98.7
	14	1+P	0.38	48.0	98.6	0.47	33.2	99.2
	15	2+ P	0.42	39.5	99.3	0.39	45.8	99.1
	16	1+ H or 1+ P	0.38	48.6	98.5	0.47	32.8	99.2
	17	1+ H or 1+ P or 1+ Rx	0.23	65.2	94.7	0.60	15.6	99.5
	18	1+H or 2+P or (1 P and 2+Rx)	0.46	48.2	99.1	0.47	44.7	99.2
5	19	1+H	0.31	22.6	99.7	0.22	54.3	98.9
	20	1+P	0.36	52.4	98.1	0.50	28.7	99.3
	21	2+ P	0.40	43.1	99.0	0.42	39.0	99.1
	22	1+ H or 1+ P	0.37	56.1	98.0	0.54	29.5	99.3
	23	1+ H or 1+ P or 1+ Rx	0.22	68.6	93.8	0.62	14.2	99.5
	24	1+H or 2+P or (1 P and 2+Rx)	0.45	55.7	98.7	0.54	38.6	99.3

Notes:

* # Years = number of years of administrative data to which the case ascertainment algorithm was applied. For example, 1+P in one year identifies individuals as disease cases if they had one or more physician billing claims with the relevant diagnosis code(s) in a one-year period. The algorithm 1+H or 2+P in one year identifies individuals as disease cases if they had one or more hospitalization or two or more physician claims with the relevant diagnosis code(s) in a one-year period.
* H = Hospital separation; P = Physician billing claim; Rx = Prescription drug record; PPV = Positive Predictive Value; NPV = Negative Predictive Value

Source: Lix L, Yogendran M, Mann J. *Defining and Validating Chronic Diseases: An Administrative Data Approach. An Update with ICD-10-CA*. Winnipeg, MB: Manitoba Centre for Health Policy, November 2008.